We claim:

1. An assay reader for determining the presence of a luminescent label in the capture zone of an assay device comprising:

a positioning member to hold the assay device in a reading position;

a light source which produces light at an appropriate wavelength to excite the luminescent label in said capture zone when said assay member is in the reading position; and

a viewing window for direct observation of the luminescent emission signal from said label in said capture zone.

2. An assay reader according to claim 1 wherein said light source is contained in a housing, the housing further containing the assay device when in the reading position, the viewing window being positioned in the housing so as to provide for direct observation of the emission signal from label in the capture zone of the device.

3. An assay reader according to claim 1, wherein the wavelength of the excitation signal is different from the wavelength of the emission signal.

4. An assay reader according to claim 3, wherein the wavelength of the excitation signal is greater than the wavelength of the emission signal.

5. An assay reader according to claim 3, wherein the wavelength of the excitation signal is less than the wavelength of the emission signal.

6. An assay reader according to claim 3 comprising a filter which blocks the passage of the excitation signal and allows the passage of the emission signal through the viewing window.

7. An assay reader according to claim 6, wherein said filter is located on said window.

8. An assay reader according to claim 7, wherein said filter is located in said assay device.

9. An assay reader according to claim 1 for determining the presence of a first and a second luminescent label in said capture zone, said reader comprising a first filter which blocks the passage of the first emission signal from the first label and a second filter which blocks passage of a second emission signal from a second luminescent label.

10. A assay reader according to claim 9, wherein the first and second filters can be exchanged between a first configuration, in which the first filter is positioned at said viewing window and a second configuration, in which the second filter is positioned at said viewing window.

11. An assay reader according to claim 9, wherein the first filter is positioned at a first viewing window and the second filter is positioned at a second viewing window.

12. An assay reader according to claim 1 for determining the presence of a first and a second luminescent label in said capture zone, said reader comprising a first light source which produces a first excitation signal for exciting the first luminescent label and a second light source which produces a second excitation signal for exciting the second luminescent label.

13. A assay reader according to claim 12, wherein the first and second light sources can be exchanged between a first mode, in which the first excitation signal is produced without the second excitation signal, and a second mode, in which the second excitation signal is produced without the first excitation signal.

14. An assay reader according to claim 9 adapted to determine the presence of three or more labels in the capture zone.

15. An assay reader according to claim 2, wherein said window comprises an aperture in said housing.

16. An assay reader according to claim 2, wherein said housing defines a recess and said window comprises the mouth of the recess.

17. An assay reader according to claim 1, wherein said window comprises a lens.

18. An assay reader according to claim 17, wherein said lens is shaped to adapt the image in said window.

19. An assay reader according to claim 18, wherein said lens is shaped to magnify the image in said window.

20. An assay reader according to claim 18 for determining the presence of a first and a second luminescent label in said capture zone, wherein emission from the first label is adapted into a first shape and emission from the second label is adapted into a second shape.

21. An assay reader according to claim 1, wherein said window comprises a non-reflective surface.

22. An assay reader according to claim 1, wherein said luminescent label is a fluoresent label and said emission signal is a fluorescent emission signal.

23. An assay reader according to claim 1, wherein said light source is an ultra-violet light source and said excitation signal is ultra-violet light.

24. An assay reader according to claim 1, comprising a battery connected to said light source.

25. An assay reader according to claim 1, comprising circuitry adapted to power the light source in the presence of liquid in said assay device.

26. An assay reader according to claim 1 comprising circuitry to provide a fixed current from said battery.

27. An assay reader according to claim 1,wherein the reader and the assay device are separable.

28. An assay reader according to claim 1, wherein the reader and the assay device are non-separable.

29. An assay reader according to claim 1, comprising a control indicator to indicate sufficient battery power to generate the excitation signal.

30. An assay reader according to claim 29, wherein said control indicator is an LED indicator on an outer surface of said reader.

31. An assay reader according to claim 29, wherein said control indicator is an electro-chromic or thermo-chromic indicator on an outer surface of said reader.

32. An assay reader according to claim 29, wherein said control indicator is a fluorescent dye, which produces a control emission signal in response to the excitation signal.

33. An assay reader according to claim 1, wherein the assay device is lateral flow immunoassay device/

34. An assay reader according to claim 1, wherein the assay device is a homogenous assay device.

35. An assay apparatus comprising an assay reader according to claim 1, and one or more assay devices.

36. An assay apparatus according to claim 35, wherein said one or more assay devices comprise a capture zone and one or more luminescent labels.

37. A method of determining the presence of a luminescent label in the capture zone of an assay device comprising:

exciting said label with an excitation signal of a first wavelength such that the excited label produces an emission signal of a second wavelength; and

visually observing the emission signal.

38. A method according to claim 37 comprising filtering said excitation signal from said emission signal prior to observing said emission signal.

39. A method according to claim 37, wherein the label is selected from the group consisting of a fluorescent label immobilised in a polysterene microsphere, a quantum dot and an up-converting phosphor containing ceramic microsphere.

40. A method of determining the presence of an analyte in a sample comprising:

providing an assay device which comprises a luminescent label and a capture zone;

contacting said device with a sample suspected of containing an analyte; such that the amount of label captured in the capture zone is altered in the presence relative to the absence of analyte in the sample;

exciting label captured in said capture zone with an excitation signal of a first wavelength such that the excited label produces an emission signal of a second wavelength; and

visually observing the emission signal.

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